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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

=> s amino acid and mobile phase modifier and silica

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60 FILES SEARCHED...  
61 FILES SEARCHED...  
63 FILES SEARCHED...

L1 41 AMINO ACID AND MOBILE PHASE MODIFIER AND SILICA

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=> dup rem

ENTER L# LIST OR (END):L1

DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2, FEDRIP, FOREGE, GENBANK, IMSPRODUCT, IMSRESEARCH, KOSMET, NUTRACEUT, PCTGEN, PHAR, PHARMAML, PROUSDDR, PS, RDISCLOSURE, SYNTHLINE'.

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L2 35 DUP REM L1 (6 DUPLICATES REMOVED)

=> d L2 1-35 ibib,abs

L2 ANSWER 1 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2006:16544 USPATFULL

TITLE: Using amines or **amino acids** as  
**mobile phase modifiers** in  
chromatography

INVENTOR(S): Goklen, Kent E, Fanwood, NJ, UNITED STATES  
Nti-Gyabaah, Joseph, Somerset, NJ, UNITED STATES  
Antia, Firorz D, Montclair, NJ, UNITED STATES  
Dahlgren, Mary Ellen, Metuchen, NJ, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006014933	A1	20060119	
APPLICATION INFO.:	US 2003-526301	A1	20031024	(10)
	WO 2003-US33978		20031024	
			20050301	PCT 371 date

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2003-422356P	20021030	(60)
	US 2003-422356P	20021030	(60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MERCK AND CO., INC, P O BOX 2000, RAHWAY, NJ,  
07065-0907, US

NUMBER OF CLAIMS: 21

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Page(s)

LINE COUNT: 646

AB This invention relates to the use of amine, **amino acid**  
or **amino acid ester mobile phase**  
**modifiers** in normal phase chromatography to improve the  
resolution and/or productivity of peptide and lipopeptide purification.  
This chromatographic method can be used for either on analytical or  
preparative scale purification.

L2 ANSWER 2 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2005:214547 USPATFULL

TITLE: Removal of bacterial endotoxin in a protein solution by immobilized metal affinity chromatography  
INVENTOR(S): Sundberg, Rhonda Lunt, Siler City, NC, UNITED STATES  
Hopfer, Robert Leonard, Moscow, PA, UNITED STATES  
PATENT ASSIGNEE(S): Wyeth Holdings Corporation, Madison, NJ, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005186218	A1	20050825
APPLICATION INFO.:	US 2005-88146	A1	20050323 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2003-474533, filed on 10 Oct 2003, PENDING A 371 of International Ser. No. WO 2002-US10937, filed on 5 Apr 2002		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-283728P	20010413 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WYETH, PATENT LAW GROUP, 5 GIRALDA FARMS, MADISON, NJ, 07940, US	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1-21	
LINE COUNT:	843	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the purification of polypeptides and the removal of endotoxin via immobilized metal affinity chromatography (IMAC). More specifically, the invention relates to methods for removing bacterial endotoxin in a protein solution. In specific embodiments, the invention relates to the elimination of endotoxin from *Moraxella catarrhalis* outer membrane proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 3 OF 35 USPATFULL on STN  
ACCESSION NUMBER: 2005:189412 USPATFULL  
TITLE: Systems, methods and kits for characterizing phosphoproteomes  
INVENTOR(S): Gygi, Steven P., Foxboro, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005164324	A1	20050728
APPLICATION INFO.:	US 2004-862195	A1	20040604 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-476010P	20030604 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	George W. Neuner, Edwards & Angell, LLP, P. O. Box 55874, Boston, MA, 02205, US	
NUMBER OF CLAIMS:	46	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	20 Drawing Page(s)	
LINE COUNT:	5571	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides systems, software, methods and kits for detecting and/or quantifying phosphorylatable polypeptides and/or acetylated polypeptides in complex mixtures, such as a lysate of a cell or cellular compartment (e.g., such as an organelle). The methods can be used in high throughput assays to profile phosphoproteomes and to correlate sites and amounts of phosphorylation with particular cell states.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 4 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2004:414763 CAPLUS  
 DOCUMENT NUMBER: 140:402847  
 TITLE: Using amines or **amino acids** as **mobile phase modifiers** in chromatography  
 INVENTOR(S): Goklen, Kent E.; Nti-Gyabaah, Joseph; Antia, Firoz D.; Dahlgren, Mary Ellen  
 PATENT ASSIGNEE(S): Merck & Co., Inc., USA  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004042350	A2	20040521	WO 2003-US33978	20031024
WO 2004042350	A3	20040715		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1558354	A2	20050803	EP 2003-776553	20031024
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2006014933	A1	20060119	US 2005-526301	20050301
PRIORITY APPLN. INFO.:			US 2002-422356P	P 20021030
			WO 2003-US33978	W 20031024

AB This invention relates to the use of amine, **amino acid** or **amino acid ester mobile phase modifiers** in normal phase chromatog. to improve the resolution and/or productivity of peptide and lipopeptide purification This chromatog. method can be used for either on anal. or preparative scale purification

L2 ANSWER 5 OF 35 USPATFULL on STN DUPLICATE 2  
 ACCESSION NUMBER: 2004:148623 USPATFULL  
 TITLE: Removal of bacterial endotoxin in a protein solution by immobilized metal affinity chromatography  
 INVENTOR(S): Sundberg, Rhonda Lunt, Siler, NC, UNITED STATES  
 Hopfer, Robert Leonard, Sanford, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004112832	A1	20040617
	US 6942802	B2	20050913
APPLICATION INFO.:	US 2003-474533	A1	20031010 (10)
	WO 2002-US10937		20020405

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-60283728	20010413
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WYETH, PATENT LAW GROUP, FIVE GIRALDA FARMS, MADISON, NJ, 07940	
NUMBER OF CLAIMS:	22	
EXEMPLARY CLAIM:	1	
LINE COUNT:	863	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the purification of polypeptides and the removal of endotoxin via immobilized metal affinity chromatography

(IMAC). More specifically, the invention relates to methods for removing bacterial endotoxin in a protein solution. In specific embodiments, the invention relates to the elimination of endotoxin from *Moraxella catarrhalis* outer membrane proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 6 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN

AB A chiral diamide stationary phase (CSP) with different lengths of spacers was synthesized by chemically bonding N-(3,5-dimethylbenzoyl)-D-phenylglycine on aminopropylsilica gel or **silica** gel bonded with different carbon chain lengths of spacers. The CSP were used for the chiral resolution of benzoyl-DL-octylamine and benzoyl-DL-**amino-acid** isopropyl esters in normal-phase LC. The spacer length and the introduction of a secondary amine group in the CSP were investigated. It was found that a CSP with a long spacer generally benefits the enantioselectivity. The introduction of a secondary amine group into the spacer leads to a decline of the separation factor. The effect of organic modifiers was also examined. Appropriate use of organic modifiers resulted in an interesting "masking effect" on the residing silanol groups of the CSP. The addition of a suitable amount of organic modifier improves the enantioselectivity, and the enantioselectivity depends on the shape of the organic modifier in the mobile phase.

L2 ANSWER 7 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2003:232021 USPATFULL  
TITLE: Yeast proteome analysis  
INVENTOR(S): Bader, Gary, North York, CANADA  
Climie, Shane, Toronto, CANADA  
Durocher, Daniel, Toronto, CANADA  
Figeys, Joseph Michael Daniel, Pickering, CANADA  
Gruhler, Albrecht, Odense N, DENMARK  
Heilbut, Adrian Mark, Toronto, CANADA  
Ho, Yuen, Toronto, CANADA  
Moore, Lynda A., Toronto, CANADA  
Moran, Michael, Toronto, CANADA  
Muskat, Brenda, Toronto, CANADA  
Tyers, Michael, Toronto, CANADA  
Wolting, Cheryl Deanna, Toronto, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003162221	A1	20030828
APPLICATION INFO.:	US 2002-252749	A1	20020923 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-323930P	20010921 (60)
	US 2001-341213P	20011030 (60)
	US 2002-345286P	20020104 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: ROPES & GRAY, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624  
NUMBER OF CLAIMS: 58  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 5 Drawing Page(s)  
LINE COUNT: 5644

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and reagents for high throughput analysis of protein-protein interaction networks using mass spectrometry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 8 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2003:219717 USPATFULL  
TITLE: Automated systems and methods for analysis of protein post-translational modification

INVENTOR(S): Chen, Jian, Mississauga, CANADA  
Daniel Figeys, Joseph Michel, Pickering, CANADA  
Larsen, Brett, Toronto, CANADA  
White, Forest M., Charlottesville, VA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003153007	A1	20030814
APPLICATION INFO.:	US 2002-330861	A1	20021226 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-343645P	20011228 (60)
	US 2002-361236P	20020301 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624	
NUMBER OF CLAIMS:	31	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	2757	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and systems of applying mass spectrometry to the analysis of peptides and **amino acids**, especially in the proteome setting. More particularly, the invention relates to a mass spectrometry-based method for detection of **amino acid** modifications, such as phosphorylation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 9 OF 35 USPATFULL on STN  
ACCESSION NUMBER: 2003:173218 USPATFULL  
TITLE: Detection of differential expression of protein using gel-free proteomics  
INVENTOR(S): Brame, Cynthia J., Charlottesville, VA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003119062	A1	20030626
APPLICATION INFO.:	US 2002-211945	A1	20020802 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-309903P	20010803 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ROPES & GRAY, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	2835	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and reagents for analyzing differential expression and/or abundance of distinct membrane-associated polypeptide samples, particularly integral membrane polypeptide samples are provided. Also provided are methods for screening pharmaceutical components that can affect expression or abundance of certain membrane-associated polypeptides; methods for identification of drug targets; and methods for diagnosis of certain disease states. Business methods for conducting a pharmaceutical business based on the result of using the above methods are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:998846 CAPLUS

DOCUMENT NUMBER: 140:191771  
TITLE: Capillary electrochromatographic behaviors of dansyl  
**amino acid** enantiomers on a  
cyclodextrin-immobilized monolithic **silica**  
column  
AUTHOR(S): Ozawa, Hiroshi; Chen, Zilin; Kawata, Katsuhiko;  
Nakagama, Tatsuro; Uchiyama, Katsumi; Hobo, Toshiyuki  
CORPORATE SOURCE: Department of Applied Chemistry, Graduate School of  
Engineering, Tokyo Metropolitan University,  
Hachioji-shi, Tokyo, 192-0397, Japan  
SOURCE: Bunseki Kagaku (2003), 52(12), 1105-1112  
CODEN: BNSKAK; ISSN: 0525-1931  
PUBLISHER: Nippon Bunseki Kagakkai  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese

AB The authors describe the capillary electrochromatog. behaviors of dansyl  
**amino acids** on a  $\gamma$ -cyclodextrin-immobilized  
monolithic **silica** column. The changes in the  
enantio-selectivity and retention behavior, were studied when organic  
modifiers, like methanol, acetonitrile and THF were added in the mobile  
phases. The enantioselectivity could be manipulated by the addition of  
moderate organic solvents. The effect of the temperature on the separation behavior was  
also examined by a thermodyn. anal. A relatively low temperature under enthalpic  
control benefits the enantio-separation. Further, the relation between the  
hydrophobicity of the analytes and the retention behavior was studied.

L2 ANSWER 11 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN

AB The chiral recognition mechanism for a series of DL-dansyl-**amino**  
-**acids** (test solutes) on a teicoplanin stationary phase was  
investigated in reversed phase liquid chromatography (RPLC). The effect of  
both a surface tension modifier (sucrose) and a chaotropic agent  
(perchlorate anion) on the enantiomeric separation was studied by varying  
their concentration,  $c$ , in the mobile phase. The thermodynamic data  
supported the fact that the sucrose molecule acted only on the hydrophobic  
part of the interaction teicoplanin/dansyl-**amino-acid**  
and not on the specific chiral part. It was demonstrated that the  
enhancement of the separation factor observed as the perchlorate salt  
concentration increased in the mobile phase was enthalpically controlled  
owing to stereoselective bonding interactions. Such behaviour was used to  
optimise the chromatographic conditions for separation of dansyl-  
**amino-acids** on teicoplanin.

L2 ANSWER 12 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN

AB Using chiral probes shown to be sensitive to the presence of mobile phase  
additives, a memory effect for these additives by an amylosic column was  
demonstrated. Exposure to these additives gave prolonged chromatographic  
performance changes even after their removal from the mobile phase. This  
finding is consistent with strong binding of the additives to the  
stationary phase. A procedure to remove bound additives was developed.

L2 ANSWER 13 OF 35 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on  
STN

ACCESSION NUMBER: 2002:16146 SCISEARCH

THE GENUINE ARTICLE: 503NW

TITLE: Enantiomeric separation of drugs and herbicides on a  
beta-cyclodextrin-bonded stationary phase

AUTHOR: Tazerouti F; Badjah-Hadj-Ahmed A Y (Reprint); Meklati B Y;  
Franco P; Minguillon C

CORPORATE SOURCE: US THB, Fac Chim, Lab Anal Organ Fonctionnelle, BP 32,  
16111 El Alia, Algiers, Algeria (Reprint); US THB, Fac  
Chim, Lab Anal Organ Fonctionnelle, Algiers, Algeria;  
CRAPC, Alger RP, Algeria; Univ Barcelona, Fac Farm, Quim  
Farmaceut Lab, E-08028 Barcelona, Spain

COUNTRY OF AUTHOR: Algeria; Spain

SOURCE: CHIRALITY, (JAN 2002) Vol. 14, No. 1, pp. 59-66.

ISSN: 0899-0042.

PUBLISHER: WILEY-LISS, DIV JOHN WILEY & SONS INC, 605 THIRD AVE, NEW  
YORK, NY 10158-0012 USA.

DOCUMENT TYPE: Article; Journal  
LANGUAGE: English  
REFERENCE COUNT: 44  
ENTRY DATE: Entered STN: 11 Jan 2002  
Last Updated on STN: 11 Jan 2002

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB A chemically bonded beta -cyclodextrin chiral stationary phase for HPLC was prepared in a "one pot" process by the reaction of a phenylated beta -cyclodextrin with **silica** gel. Various racemic analytes such as drugs (aminoalcohol adrenergic beta -Blockers, benzodiazepine anxiolytics, arylpropionic acid antiinflammatory agents) and herbicides (aryloxypropionic acids and esters) were separated on the prepared material. The column showed good chiral recognition ability for most of the solutes tested when using heptane and either 2-propanol or chloroform as organic **mobile phase modifiers**. (C) 2002 Wiley-Liss, Inc.

L2 ANSWER 14 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2001:79286 USPATFULL

TITLE: Low molecular weight displacers for protein purification in hydrophobic interaction and reversed phase chromatographic systems

INVENTOR(S): Cramer, Steven M., Schenectady, NY, United States  
Shukla, Abhinav A., Bothell, WA, United States  
Sunasara, Khurram M., Troy, NY, United States

PATENT ASSIGNEE(S): Rensselaer Polytechnic Institute, Troy, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6239262	B1	20010529
APPLICATION INFO.:	US 1998-223093		19981230 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-70653P	19980107 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Low, Christopher S. F.	
ASSISTANT EXAMINER:	Mohamed, Abdel A.	
LEGAL REPRESENTATIVE:	Heslin & Rothenberg, PC	
NUMBER OF CLAIMS:	31	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	18 Drawing Figure(s); 18 Drawing Page(s)	
LINE COUNT:	619	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for purification of proteins by displacement chromatography in hydrophobic interaction and reversed phase chromatographic systems uses low molecular weight (less than about 10,000) surface-active compounds as displacers. Examples of effective displacers are benzethonium chloride, benzyltributylammonium chloride, and tetrahexylammonium chloride.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 15 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN

AB Nine dansylamino-acids (DAA) were separated by CZE on a fused-**silica** capillary (68 cm + 50  $\mu$ m i.d., 48 cm effective length) operated at an applied voltage of 25 kV, with 40mM-ammonium acetate buffer of pH 2.4 containing 50mM-glycine as running buffer and detection at 214 nm. Using the above conditions with reduced electroosmotic flow, a mixture of the 9 DAA was baseline resolved in less than 16 min. The separation mechanism of CZE with lower electroosmotic flow is discussed in some detail.

L2 ANSWER 16 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN

AB Recently, a new HPLC chiral stationary phase (CSP) prepared by covalently bonding (+)-(18-crown-6)-2,3,11,12-tetracarboxylic acid on **silica**

gel was successfully employed in resolving various racemic natural and unnatural **amino-acids** containing a primary amino group. Current work details on-going efforts to improve the effectiveness of this type of material. The analytes used in this study included various substituted phenylalanines, phenylglycine homologues and other primary **amino-acids**. In an attempt to increase enantioselectivity, the effect of methanol and triethylamine modifiers was evaluated in an aqueous mobile phase containing sulfuric acid. In general, retention time increased with increasing methanol and triethylamine concentration. In addition, highest enantioselectivities were obtained with high methanol and high triethylamine; however, these conditions produced excessively long retention. All of the analytes were well resolved on the CSP with a mobile phase of 20% methanol containing 14.3mM-triethylamine and 10.0mM-sulfuric acid.

L2 ANSWER 17 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2000:135020 USPATFULL  
TITLE: Chiral separations of **amino acids**  
INVENTOR(S): Bopp, Ronald J., Downingtown, PA, United States  
PATENT ASSIGNEE(S): Chiral Technologies, Inc., Exton, PA, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6130353		20001010
	WO 9841489		19980924
APPLICATION INFO.:	US 1999-380849		19991213 (9)
	WO 1998-US5366		19980318
			19991213 PCT 371 date
			19991213 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-40987P	19970318 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Killos, Paul J.	
LEGAL REPRESENTATIVE:	Mathews, Collins, Shepard & Gould, P.A.	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
LINE COUNT:	265	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An enantiomeric mixture of a chiral **amino acid** is separated into its respective enantiomers through chromatography on a chiral polysaccharide stationary phase eluting with a mobile phase comprising (i) a liquid lower alkanol and (ii) a carboxylic acid soluble in the lower alkanol. The mobile phase may also contain a liquid hydrocarbon.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 18 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN

AB Quinine (QN) and t-butyl carbamoylated quinine (tBuCQN) were investigated as chiral selectors (CS) for capillary electrophoresis (CE) enantioseparations using benzoyl-, 3,5-dinitrobenzoyl- and 3,5-dinitrobenzyloxycarbonyl-amino-acids (AA) as test compounds. CE was effected on an uncoated fused-silica capillary (44 cm + 50  $\mu$ m i.d.; 37 cm to detector) operated at an applied voltage of .minus.25 kV and detection at 214 nm. Injections of 50  $\mu$ g/ml AA derivatives in methanol were made in hydrodynamic mode for a period of 5 s (corresponding to 13.3 nl). The basic mobile phase was 12.5mM-ammonium acetate buffer (pH 7.9) in methanol. The addition of various amounts of QN and EBuCQN as well as acetonitrile, ethanol and organic acids as CS and **mobile phase modifiers** was studied. The pH of the buffer was varied from 7-9, the capillary temperature from 15 to 25°C and the applied voltage from .minus.15 to .minus.30 kV. Results (tabulated) showed that better enantioseparations were obtained with tBuCQN as CS than with QN. Addition of acetonitrile led to a decrease in selectivity and addition



of methanol to an increase in selectivity. Best temperature for selectivity was 15°C and an applied voltage of +25 k V. Optimum mobile phase conditions were, 12.5mM-ammonia, 100mM-octanoic acid and 10mM-tBuCQN in an ethanol/methanol mixture (3:2).

L2 ANSWER 19 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN  
AB Dinitrophenyl and dansyl **amino-acid** derivatives as well as position isomers of nitrophenols were separated by isotachophoretic focusing on fused-**silica** capillaries (effective length 19 or 28 cm + 0.25 mm i.d.) coated with polyethylenimine to reduce electro-osmotic flow and detection at 330 nm. The leading electrolyte (pH 8) was 10mM-Tris hydrochloride/10mM-Tris/0.06% hydroxypropylmethylcellulose (to reduce electro-osmotic flow)/2.5 µg/ml polyethylenimine; the terminating electrolyte was 50mM-2-(cyclohexylamino)-ethanesulfonic acid/5mM-KOH; background 8% ampholine (pH 3.5-10); electric current 7 µA.

L2 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999:242162 CAPLUS  
DOCUMENT NUMBER: 131:13123  
TITLE: Effect of selector coverage and mobile phase composition on enantiomeric separations with ristocetin A chiral stationary phases  
AUTHOR(S): Ekborg-Ott, K. Helen; Wang, Xiande; Armstrong, Daniel W.  
CORPORATE SOURCE: Department of Chemistry, University of Missouri-Rolla, Rolla, MO, 65409, USA  
SOURCE: Microchemical Journal (1999), 62(1), 26-49  
CODEN: MICJAN; ISSN: 0026-265X  
PUBLISHER: Academic Press  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Three different amts. (i.e., selector coverages) of ristocetin A macrocyclic antibiotic were covalently bonded to **silica** gel, packed in stainless steel columns, and evaluated as chiral stationary phases (CSPs) in HPLC. The three columns (i.e., CSPs) were examined and compared in the reversed-phase, polar-organic, and normal-phase modes. The retention behavior ( $k'$ ), selectivity ( $\alpha$ ), resolution (RS), and number of theor. plates (N) for all three columns are discussed and compared in each mobile phase mode. The coverage of the chiral selector had a profound effect on the chromatog. behavior of the more retained enantiomers. A special mobile phase composition (i.e., methanol plus very small amts. of acid and base modifiers) resulted in improved baseline sepns., without greatly affecting the anal. times, for all chiral analytes evaluated. The column stabilities were excellent when switching between different mobile phase modes. (c) 1999 Academic Press.

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 21 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN  
AB Standard 1mM-**amino-acid** (AA) solutions in 22mM-sodium phosphate buffer of pH 9.4 were prepared and 200 µl portions of each were incubated with 200 µl 2mM-fluorescein isothiocyanate (FTIC) in acetone at 50°C for 5 h. Portions of the resultant derivatives were analysed by capillary electrophoresis on a fused-**silica** capillary (57 cm + 50 µm i.d.) at an applied voltage of 10-30 kV and with 80-120mM-sodium borate buffer of pH 9-10 as running buffer (with or without added alpha-, beta- or gamma-cyclodextrin) and organic solvent (methanol, acetone, acetonitrile, THF, 2-butanol, isopropanol or propanol) and laser-induced fluorescence detection at 520 nm (excitation at 488 nm). 18 types of FTIC **amino-acids** were separated with 96mM-borate containing 25% acetone (system 1) or 10% methanol (system 2). 19 FTIC **amino-acids** were separated with 80mM-borate containing 45mM-alpha-cyclodextrin (system 3). 20 FTIC-**amino acids** were separated with a combination of systems 2 and 3. The detection limits with systems 1 and 2 were 0.052-1.01 fmol.

L2 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:491329 CAPLUS  
DOCUMENT NUMBER: 129:197343  
TITLE: Highly enantioselective HPLC separations using the covalently bonded macrocyclic antibiotic, ristocetin A, chiral stationary phase  
AUTHOR(S): Ekborg-Ott, K.; Liu, Youbang; Armstrong, Daniel W.  
CORPORATE SOURCE: Department Chemistry, University Missouri-Rolla, Rolla, MO, USA  
SOURCE: Chirality (1998), 10(5), 434-483  
CODEN: CHRLEP; ISSN: 0899-0042  
PUBLISHER: Wiley-Liss, Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The macrocyclic glycopeptide, ristocetin A, was covalently bonded to a **silica** gel support and evaluated as a liquid chromatog. (LC) chiral stationary phase (CSP). Over 230 racemates were resolved in either the reversed-phase mode, the normal-phase mode, or the polar-organic mode. The retention behavior and selectivity of this CSP were examined in each mode. Optimization of sepns. on this column is discussed. The ristocetin A CSP appeared to be complimentary to other glycopeptide CSPs (i.e., vancomycin and teicoplanin). Column stability was excellent. The CSP was not irreversibly altered when going from one mobile phase mode to another.  
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 23 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN  
AB The effect of up to 0.05M-LiClO<sub>4</sub> as HPLC **mobile phase modifier** on the separation of enantiomers of dansyl **amino acids** (DAA) was investigated using N-dansylated norvaline and tryptophan as model DAA. HPLC was effected on A Shandon HSA-bonded **silica** column (15 cm + 4.6 mm i.d.) operated at 10-40°C with perchlorate in aqueous 0.05M-NaH<sub>2</sub>PO<sub>4</sub> at pH 6/acetonitrile (9:1) as mobile phase (1 ml/min) and diode-array detection. Thermodynamic Gibbs-Helmholtz parameters were evaluated from linear Van't Hoff graphical plots and data obtained was used to optimize separation conditions. The chosen conditions were 20°C and a perchlorate concentration of 0.03M, providing a separation factor of 1.31 for enantiomers of N-dansyl-DL-norvaline.

L2 ANSWER 24 OF 35 PROMT COPYRIGHT 2006 Gale Group on STN

ACCESSION NUMBER: 97:468426 PROMT  
TITLE: Coated **Silica** Columns Debut  
SOURCE: High Tech Separations News, (1 Aug 1997) pp. N/A.  
ISSN: 1046-039X.  
LANGUAGE: English  
WORD COUNT: 339

\*FULL TEXT IS AVAILABLE IN THE ALL FORMAT\*

AB Mitsubishi Chemical America, Inc. (1 N. Lexington Ave., White Plains, NY 10601; Tel: 914/286-3600) designed chiral separation columns to resolve alpha-hydroxy carboxylic acids and D,L-**amino acids**. The trademarked MCI GEL CRS10W column and its companion product trademarked MCI GEL CRS15W (an optical isomer of CRS10W) column are based on a 3-micron ODS **silica** with a 100 mean pore diameter coated with N,N-dioctyl-L(or D)-alanine. These columns provide resolution of about 20 D,L-**amino acids**, including the baseline separation of four isomers of allo-DL-and DL-isoleucine, on a single column at room temperature. A combination of ligand exchange coordination and hydrophobic interaction is the chiral resolution mechanism. This mechanism of coordination chemistry means that column performance varies with changes in column temperature and with changes in copper (II) concentration. The alkyl chain provides a hydrophobic interaction mechanism, which means that use of organic solvents as **mobile phase modifiers** can effect the retention of some solutes. This allows the separation of several **amino acids** and/or hydroxy carboxylic acids with different hydrocarbon functional groups on a single column. The MCI GEL CRS10W columns provide resolution of DL-**amino**

**acids** and alpha-hydroxy carboxylic acids, in particular, the complete baseline separation of isoleucine. The separation of all 4 isomers indicates that the isoleucine contains approximately 33% of allo-DL-isomers. The CRS10W column also provides separation of alpha-hydroxy carboxylic acids, such as DL-lactic acid, and direct optical resolution of DL-malic acid without pre-derivatization.

The MCI GEL CRS15W column is used for trace enantiomeric analysis. In such applications, it is often advantageous to elute the trace impurities in front of the main peak of material to avoid over lapping of the impurity peaks with the large peak of the main substance. This column is recommended for the trace analysis of L- isomers in purified D-lactic acid, because the L-isomer elution front allows easy identification of the trace impurity. The initial D-isomer elution of CRS10W would mask the identification of the L- lactic acid. Alan D. Sharpe, general manager, is the Mitsubishi contact.

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L2 ANSWER 25 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN

AB The use of alkanesulfonic acids as buffer and an ion-pairing agent under acidic conditions for the separation of native **amino-acids** by capillary electrophoresis (CE) was investigated. Best separations were obtained with use of either ethanesulfonic or octanesulfonic acid in the running buffer at a buffer pH of 2.3, 2.4 or 2.8. CE was effected on a polyamide-coated fused-silica capillary column (60 cm + 50 µm i.d.) operated at an applied potential of 20 kV, with 20mM-acetate buffer containing 50mM-ethanesulfonic acid (pH 2.3) as running buffer and detection at 185 nm. A mixture of 20 **amino-acids** (listed) was fully resolved in 20 min, except for the co-elutions of threonine and aspartine and of methionine and glutamine. The successful separation of **amino acids** under the cited conditions is attributed to the coating of the fused-silica surface with adsorption of the alkanesulfonic acid on the positively-charged capillary wall resulting in a change in the direction in the magnitude and direction of the electro-osmotic flow. The effects of alkanesulfonic acid chain length and concentration, pH and applied voltage are discussed.

L2 ANSWER 26 OF 35 MEDLINE on STN

DUPLICATE 3

ACCESSION NUMBER: 94182747 MEDLINE

DOCUMENT NUMBER: PubMed ID: 8135373

TITLE: Influence of pH on retention and selectivity in micellar liquid chromatography: consequences of micellar-induced shifts of ionization constants.

AUTHOR: Rodgers A H; Khaledi M G

CORPORATE SOURCE: Chemistry Department, University of New Orleans, Lakefront, Louisiana 70148.

CONTRACT NUMBER: GM38738 (NIGMS)

SOURCE: Analytical chemistry, (1994 Feb 1) 66 (3) 327-34.  
Journal code: 0370536. ISSN: 0003-2700.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199404

ENTRY DATE: Entered STN: 19940428

Last Updated on STN: 19940428

Entered Medline: 19940421

AB The retention and selectivity of ionizable solutes in the two-surfactant-mediated reversed-phase LC techniques (micellar and ion pair) are compared through the use of a general retention equation for mono- and zwitterionic solutes. In RPLC with different **mobile-phase modifiers** (organic solvents, surfactants), the influence of pH can be quantitatively described by one general equation. The existing theory for the secondary chemical equilibria has been applied to compare selectivity effects in micellar and ion-pair chromatography. In order to predict the influence of different mobile-phase compositions on the selectivity of ionizable compounds, one should determine how a

mobile-phase parameter influences the ionization equilibria (i.e., selective shifts of pKa) and self-selectivity (defined as the ratio of retention factors of the acid/conjugate base). For example, the first ionization constants of **amino acids** and peptides in aqueous mobile phase are between pH 2.3 and 3.4. Consequently, the pH required to maximize the retention of these solutes by ion suppression is less than the operational pH range of **silica**-based columns. In addition, since the pKa values of these solutes are similar, adjustment of pH has little effect on separation selectivity. In contrast, ion-pairing and micellar mobile phases with SDS surfactant increase the magnitude and range of the ionization constants. These trends are more pronounced with micellar mobile phase. The displacement of solute ionization constants to higher pH with micellar mobile phase allows the maximal, limiting, retention of zwitterionic solutes to be observed within the pH limits of **silica**-based columns. (ABSTRACT TRUNCATED AT 250 WORDS)

L2 ANSWER 27 OF 35 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:69471 SCISEARCH  
 THE GENUINE ARTICLE: QB582  
 TITLE: EXPERIMENTAL STUDIES IN METAL AFFINITY DISPLACEMENT CHROMATOGRAPHY OF PROTEINS  
 AUTHOR: KIM Y J (Reprint); CRAMER S M  
 CORPORATE SOURCE: RENSSELAER POLYTECH INST, HOWARD P ISERMANN DEPT CHEM ENGN, TROY, NY 12180; ALBANY MED COLL, DEPT RES, ALBANY, NY 12208  
 COUNTRY OF AUTHOR: USA  
 SOURCE: JOURNAL OF CHROMATOGRAPHY A, (2 DEC 1994) Vol. 686, No. 2, pp. 193-203.  
 ISSN: 0021-9673.  
 PUBLISHER: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.  
 DOCUMENT TYPE: Article; Journal  
 FILE SEGMENT: PHYS; LIFE  
 LANGUAGE: English  
 REFERENCE COUNT: 48  
 ENTRY DATE: Entered STN: 1995  
 Last Updated on STN: 1995

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB Metal affinity displacement chromatography was employed for the purification of proteins. The **mobile phase modifier** imidazole was shown to exhibit complex induced gradients in these displacement systems resulting in different imidazole microenvironments in each protein displacement zone. Furthermore, the induced imidazole gradient produced an elevated displacer concentration at the rear of the displacement train. While adsorption isotherms measured under the initial carrier conditions were unable to predict these displacements, isotherms measured under the induced imidazole conditions qualitatively predicted the effluent displacement profiles. It is believed that these induced imidazole gradients speed up the kinetics of the displacement process and are in part responsible for the sharp boundaries seen in these separations. This work demonstrates the ability of this bioseparation technique to effect efficient multicomponent separations and illustrates the importance of **mobile phase modifier** effects in metal affinity displacement chromatography.

L2 ANSWER 28 OF 35 USPATFULL on STN

ACCESSION NUMBER: 93:72060 USPATFULL  
 TITLE: Transforming growth factor (TGF) peptides  
 INVENTOR(S): Todaro, George J., 1940 15th Ave. East, Seattle, WA, United States 98112

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5240912		19930831
APPLICATION INFO.:	US 1991-803723		19911209 (7)

DISCLAIMER DATE: 20060328  
RELATED APPLN. INFO.: Continuation of Ser. No. US 1989-232335, filed on 12 Aug 1989, now abandoned which is a continuation of Ser. No. US 1985-777016, filed on 17 Sep 1985, now patented, Pat. No. US 4816561 which is a continuation-in-part of Ser. No. US 1984-598136, filed on 12 Apr 1984, now abandoned which is a continuation-in-part of Ser. No. US 1983-492751, filed on 9 May 1983, now abandoned

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Lee, Lester L.  
ASSISTANT EXAMINER: Fox, Donna M.  
LEGAL REPRESENTATIVE: Millen, White, Zelano, & Branigan  
NUMBER OF CLAIMS: 27  
EXEMPLARY CLAIM: 1  
LINE COUNT: 2330

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel biologically active polypeptides, including a new class of transforming growth factor (TGF) polypeptides, which exhibit cell growth promoting properties are disclosed, as well as a process for isolating the TGF polypeptides from both human and murine cell lines in homogeneous form. Also disclosed are antigenic oligopeptides derived from the TGF polypeptides and antibodies raised therefrom which have application in the detection and treatment of malignancies and oligopeptides have the ability to bind with cellular growth factor receptors and thus to interfere with transformation of certain cell lines into a cancerous state. Compositions and methods based on the disclosed peptides for detection and treatment of cancer and other proliferative diseases and for cell or tissue growth associated treatment, e.g., wound healing, ulcer therapy and bone loss are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 1994:681 CAPLUS

DOCUMENT NUMBER: 120:681

TITLE: Separation of neuropeptide Y diastereomers by high-performance liquid chromatography and capillary zone electrophoresis

AUTHOR(S): Kirby, Dean A.; Miller, Charleen L.; Rivier, Jean E.  
CORPORATE SOURCE: Clayton Foundation Laboratories for Peptide Biology, The Salk Institute for Biological Studies, 10010 North Torrey Pines Road, La Jolla, CA, 92037, USA

SOURCE: Journal of Chromatography (1993), 648(1), 257-65  
CODEN: JOCRAM; ISSN: 0021-9673

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Separation of analogs of neuropeptide Y (NPY) in which a single D-amino acid replaced the corresponding naturally occurring residue was performed by chromatog. techniques to ensure the quality of the synthetic peptides to be used for structural and biol. studies. Of the 35 compds., 28 were easily separated ( $\alpha = 1.02-2.76$ ) from native NPY by standard reversed-phase high-performance chromatog. (RP-HPLC) methods using a Vydac C18 column and a gradient buffer system developed in the authors' laboratory comprised of triethylammonium phosphate (TEAP) at pH 2.25 and acetonitrile at 40°. The identical diastereomers could be separated on the same solid support and by using 0.1% trifluoroacetic acid (TFA) as the **mobile phase modifier**, however, separation factors were smaller and retention times were longer. Three of the remaining seven unresolved analogs were separated ( $\alpha = 1.02-1.96$ ) by changing the solid-phase support to Vydac di-Ph derivatized **silica** and a buffer system consisting of 0.1% TFA and acetonitrile. Of the four remaining unresolved analogs, only two could be separated by capillary zone electrophoresis (CZE) in 0.1 M sodium phosphate at pH 2.5, but all four were finally resolved by changing the electrophoretic buffer to 0.1 M TEAP buffer at pH 2.5. Migration times of the diastereomers differed by 0.2-2.0 min from that of the natural NPY. In addition to confirming the

uniqueness of each isomer, this investigation demonstrated the expansive utility and high efficiency of the TEAP buffer system for both RP-HPLC and CZE as well as the difference in selectivity produced by the TEAP and TFA buffers in RP-HPLC. The conditions described here have broad applications for the anal. and preparative separation of synthetic and native peptides.

L2 ANSWER 30 OF 35 USPATFULL on STN

ACCESSION NUMBER: 92:46867 USPATFULL  
TITLE: Oncostatin M and novel compositions having anti-neoplastic activity  
INVENTOR(S): Marquardt, Hans, Mercer Island, WA, United States  
Zarling, Joyce M., Seattle, WA, United States  
Shoyab, Mohammed, Seattle, WA, United States  
Hanson, Marcia B., Seattle, WA, United States  
Lioubin, Mario N., Bellevue, WA, United States  
Brown, Thomas J., Seattle, WA, United States  
Ikeda, Tatsuhiko, Kobe, Japan  
PATENT ASSIGNEE(S): Oncogen, Seattle, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5120535		19920609
APPLICATION INFO.:	US 1987-46846		19870504 (7)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1986-935283, filed on 26 Nov 1986, now abandoned which is a continuation-in-part of Ser. No. US 1985-811235, filed on 20 Dec 1985, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Weimar, Elizabeth C.		
ASSISTANT EXAMINER:	Poulos, Gail		
LEGAL REPRESENTATIVE:	Pennie & Edmonds		
NUMBER OF CLAIMS:	2		
EXEMPLARY CLAIM:	1		
LINE COUNT:	932		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel compositions are provided for modulating growth, particularly of tumor cells, which compositions are combinations of Oncostatin M, and one or both of transforming growth factors or  $\gamma$ -interferons, or analogs thereof. In addition, a novel transforming growth factor is provided, designated TGF- $\beta$ 2, as well as methods for its preparation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1992:604211 CAPLUS  
DOCUMENT NUMBER: 117:204211  
TITLE: Packed column subcritical fluid chromatography of underivatized **amino acids**  
AUTHOR(S): Camel, V.; Thiebaut, D.; Caude, M.; Dreux, M.  
CORPORATE SOURCE: Lab. Chim. Anal. Processus Ind., ESPCI, Paris, 75231, Fr.  
SOURCE: Journal of Chromatography (1992), 605(1), 95-101  
CODEN: JOCRAM; ISSN: 0021-9673  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Packed column subcrit. fluid chromatog. of underivatized **amino acids** is described. Using pyridine (or ethylene glycol)-methanol-water-triethylamine as modifier in the carbon dioxide, mixts. of **amino acids** can be separated on diol-bonded **silica** and detected without derivatization using evaporative light-scattering detection. Pyridine and ethylene glycol are shown to impregnate the stationary phase and to improve efficiency. The results demonstrate the wide potential of packed column subcrit. fluid chromatog. for the determination of polar compds.

L2 ANSWER 32 OF 35 USPATFULL on STN

ACCESSION NUMBER: 89:74159 USPATFULL  
TITLE: Biologically active polypeptides  
INVENTOR(S): Todaro, George J., 1940 15th Ave. East, Seattle, WA,  
United States 98112

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4863899		19890905
APPLICATION INFO.:	US 1987-53249		19870522 (7)
RELATED APPLN. INFO.:	Division of Ser. No. US 1985-777016, filed on 17 Sep 1985, now patented, Pat. No. US 4861561 which is a continuation-in-part of Ser. No. US 1984-598136, filed on 12 Apr 1984, now abandoned which is a continuation-in-part of Ser. No. US 1983-492751, filed on 9 May 1983, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Phillips, Delbert R.		
LEGAL REPRESENTATIVE:	Dow, Karen Babyak, Jecminek, Al A.		
NUMBER OF CLAIMS:	44		
EXEMPLARY CLAIM:	1		
LINE COUNT:	2622		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel biologically active polypeptides, including a new class of transforming growth factor (TGF) polypeptides, which exhibit cell growth promoting properties are disclosed, as well as a process for isolating the TGF polypeptides from both human and murine cell lines in homogeneous form. Also disclosed are antigenic oligopeptides derived from the TGF polypeptides and antibodies raised therefrom which have application in the detection and treatment of malignancies and oligipeptides which have the ability to bind with cellular growth factor receptors and thus to interfere with transformation of certain cell lines into a cancerous state. Compositions and methods based on the disclosed peptides for detection and treatment of cancer and other proliferative diseases and for cell or tissue growth associated treatment, e.g., wound healing, ulcer therapy and bone loss are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 33 OF 35 USPATFULL on STN

ACCESSION NUMBER: 89:23516 USPATFULL  
TITLE: Biologically active polypeptides  
INVENTOR(S): Todaro, George J., 1940 15th Ave. East, Seattle, WA,  
United States 98112

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4816561		19890328
APPLICATION INFO.:	US 1985-777016		19850917 (6)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1984-598136, filed on 12 Apr 1984, now abandoned which is a continuation-in-part of Ser. No. US 1983-492751, filed on 9 May 1983, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Phillips, Delbert R.		
LEGAL REPRESENTATIVE:	Dow, Karen B., Jecminek, A. A.		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1		
LINE COUNT:	2235		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel biologically active polypeptides, including a new class of transforming growth factor (TGF) polypeptides, which exhibit cell growth promoting properties are disclosed, as well as a process for isolating the TGF polypeptides from both human and murine cell lines in homogeneous form. Also disclosed are antigenic oligopeptides derived from the TGF polypeptides and antibodies raised therefrom which have

application in the detection and treatment of malignancies and oligopeptides which have the ability to bind with cellular growth factor receptors and thus to interfere with transformation of certain cell lines into a cancerous state. Compositions and methods based on the disclosed peptides for detection and treatment of cancer and other proliferative diseases and for cell or tissue growth associated treatment, e.g., wound healing, ulcer therapy and bone loss are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 34 OF 35 ANABSTR COPYRIGHT 2006 RSC on STN

AB The stationary phases comprised a chiral diamide structure connected to the **silica** gel surface by a decamethylene spacer (cf. Anal. Chemical, 1988, 60, 1985). One phase had the remaining surface silanols trimethylsilylated, and the other was untreated. N-4-nitrobenzoylamino-acid isopropyl esters were resolved on columns (25 cm + 4.6 mm) of the phases (CSP 1 and CSP 2) at 40° with CO<sub>2</sub> as mobile phase (260 bar and 5 ml min.minus.1). Methanol and propan-2-ol were used as **mobile phase modifiers**. Detection was at 255 nm. The selectivity was compared to that obtained by LC with propan-2-ol in hexane as mobile phase.

L2 ANSWER 35 OF 35 DISSABS COPYRIGHT (C) 2006 ProQuest Information and Learning Company; All Rights Reserved on STN

ACCESSION NUMBER: 81:11914 DISSABS Order Number: AAR8211566

TITLE: SIMPLEX OPTIMIZATION IN GRADIENT ELUTION HIGH PERFORMANCE LIQUID CHROMATOGRAPHY. THE PREPARATION AND CHARACTERIZATION OF BIO-COMPATIBLE HIGH PERFORMANCE LIQUID CHROMATOGRAPHY PACKING MATERIALS

AUTHOR: WATSON, MARK WAINWRIGHT [PH.D.]

CORPORATE SOURCE: UNIVERSITY OF MINNESOTA (0130)

SOURCE: Dissertation Abstracts International, (1981) Vol. 42, No. 12B, p. 4782. Order No.: AAR8211566. 361 pages.

DOCUMENT TYPE: Dissertation

FILE SEGMENT: DAI

LANGUAGE: English

ENTRY DATE: Entered STN: 19921118

Last Updated on STN: 19921118

AB Part I deals with the application of the simplex optimization procedure to gradient elution HPLC. A chromatographic response function (CRF) was developed which allows the chromatographer to select chromatographic performance goals dealing with minimum acceptable peak separation and maximum acceptable analysis time. Only those pairs of peaks that do not meet the separation goals are used to calculate the value of the CRF. Likewise, only those separations that exceed the maximum allowable time contribute to the value of the CRF. With these constraints, the numerical value of the CRF directly indicates how good a particular separation is relative to the desired separation.

Using the CRF in conjunction with the simplex procedure, mixtures of PTH-amino acids were separated by adjusting the initial and final gradient solvent composition, the shape of the gradient, the duration of the gradient and the flow rate. The combination of the CRF with the simplex procedure appears to be an easy and efficient means of locating experimental conditions which give the desired separation.

Part II deals with the preparation and characterization of neutral, hydrophilic high performance chromatographic support materials which can be used in protein chromatography. The importance of the base **silica**, organosilane, acid and/or thermal pre-treatment, endcapping, method of silanization and extent of surface coverage on the adsorption and chromatographic properties of the derivatized materials was studied. Comparison of the 'optimum' support with commercially available supports showed that the supports developed in this work are as good or better than the commercial supports tested. Our supports are quite stable in buffer and show no change in their adsorptive properties as a function of time. Protein recovery was measured and found to be on the order of 90% for protein concentrations of approximately 1 (mu)M. The effects of



mobile phase modifiers on protein recovery, retention time and peak width were studied and showed that addition of salt (e.g., NaCl or NaClO<sub>4</sub>) to a 0.1 M Na<sub>2</sub>HPO<sub>4</sub> (pH 7) mobile phase was effective in reducing interactions between the protein and support. Decreasing the flow rate caused an increase in protein loss while decreasing the temperature caused a decrease in protein loss.

=> d his

(FILE 'HOME' ENTERED AT 12:18:59 ON 20 JAN 2006)

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ESBIODASE, FEDRIP, ...' ENTERED AT 12:19:10 ON 20 JAN 2006

L1 41 S AMINO ACID AND MOBILE PHASE MODIFIER AND SILICA  
L2 35 DUP REM L1 (6 DUPLICATES REMOVED)